

Physics Practice Test Answer Key

Qatar Senior School Certificate 2009

Selected Response Answer Key

Item	Answer
1	C
2	C
3	A
4	D
5	B
6	A
7	B
8	B
9	D
10	A
11	B

Answer to question 12:

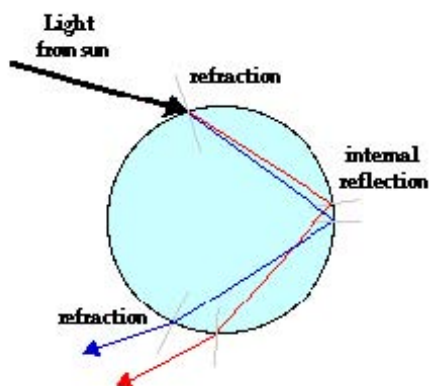
How p-p chain fusion creates energy in younger stars:

Any response indicating that proton-proton fusion fuses 2 hydrogen atoms together to form helium. This action releases energy as a byproduct.

How stars create energy after p-p chain fusion ends:

After all of the hydrogen reserves have been spent, the p-p chain fusion begins to fuse helium in the same fashion. The process of fusing helium until carbon is called the triple alpha process. This goes on until there is no energy gain from fusion (when iron is left). At this point the star begins to die.

Answer to question 13:



Answer to question 14:

A. $V_{\text{rms}} = V_{\text{max}} / \sqrt{2} = 5 \text{ V} / \sqrt{2} = 3.5 \text{ V}$

B. $T = 1 / f = 1 / 60 \text{ Hz} = 0.0167 \text{ sec}$

C. $v = \lambda \times f$
 $\lambda = v / f = v / 60 \text{ Hz} = 0.0167v \text{ sec}$